

## REMARKS

The present amendment is prepared in accordance with the requirements of 37 C.F.R. § 1.121. Applicants appreciate the thoroughness with which the Examiner has examined the above-identified application. Reconsideration is requested in view of the remarks below.

Claims 8, 21, 32 and 40 have been amended. Claims 1-7, 12, 13, 25, 30, 38 and 43 have been canceled. Claims 75-108 have been added.

Support for the amendments to the claims and the new claims can be found in the originally filed claims and in the specification at pages 7 and 10.

No new matter has been added.

### **Claim Rejections - 35 USC§ 102/103**

#### *Blomgren et al.*

The Examiner has rejected claim 8 under 35 USC 102(b) as being anticipated by or, in the alternative, under 35 U. S.C. 103(a) as being obvious over, Blomgren et al (US 5,246,794). Applicants disagree.

Claim 8 is directed to a sheet comprising fibrillated lyocell fibers and a microbiological interception enhancing agent. The fibrillated lyocell fibers have a Canadian Standard Freeness of less than about 100, and a fiber diameter of less than or equal to about 400nm. This sheet is capable of being carbonized at a temperature of less than about 600°C.

Applicant submits that the present invention is not anticipated by Blomgren et al. Anticipation is but the ultimate or epitome of obviousness. To constitute anticipation, all material elements of a claim must be found in one prior art source. In re Marshall, 577 F.2d 301, 198 USPQ 344 (CCPA 1978).

Blomgren is limited to cathode collectors made in a dry method from carbon fibrils, and their use in liquid cathode cells. (Abstract and col. 1, ll. 10-11.) It discloses that the cathode collectors are made by mixing electrically conductive dry carbon fibrils with a dry binder (col. 1, l. 45 to col. 2, l. 5 and col. 3, ll. 15-30), and that the dry fibrils are essentially cylindrical fibrils with an outer region of continuous layers of ordered carbon atoms and a distinct inner core region (col. 2, ll. 20-28 and col. 2, l. 66 to col. 3, l. 14). The fibrils are produced by contacting a catalyst of metal-containing particles with a gaseous, carbon-containing precursor compound at a temperature high enough for fibril formation. (Col. 2, ll. 29-40.) Blomgren discloses carbon-containing compounds of hydrocarbons; aliphatic hydrocarbons; oxygen-containing hydrocarbons and carbon monoxide, and metal-containing particles in the transition metals. (Col. 2, ll. 41-56.) Blomgren et al. does not disclose or suggest fibrillated lyocell fibers, nor does it disclose or suggest a sheet having a microbiological interception enhancing agent on a portion of some of the fibrillated fibers. As such, the claims of the instant invention include limitations not disclosed nor contemplated by Blomgren et al. such that Blomgren et al. does not anticipate nor render obvious the instant invention.

Wilson et al.

The Examiner has also rejected claims 8, 9, 13, 20, 21 and 25 under 35 USC 102(b) as being anticipated by or, in the alternative, under 35 U. S.C. 103(a) as being obvious over, Wilson et al (US 6,321,915). Applicants disagree.

As discussed above, claim 8 is directed to a sheet comprising fibrillated lyocell fibers and a microbiological interception enhancing agent. The fibrillated lyocell fibers have a Canadian Standard Freeness of less than about 100, and a fiber diameter of less

than or equal to about 400nm. This sheet is capable of being carbonized at a temperature of less than about 600°C.

Similarly, amended claim 21 is directed to a sheet comprising activated, carbonized fibrillated lyocell fibers and a microbiological interception enhancing agent on a portion of some of the fibrillated lyocell fibers. The fibrillated lyocell fibers having a BET surface area of greater than about 800m<sup>2</sup>/g, wherein prior to carbonization and activation, the fibrillated fibers have a Canadian Standard Freeness of less than about 100 or a fiber diameter of less than or equal to about 400nm. Activation occurs in less than or equal to about 30 minutes at a temperature greater than about 875°C in an oxidizing atmosphere.

Applicant submits that the present invention is not anticipated by the cited reference of Wilson et al. since all material elements of claims 8 and 21 are not found in the Wilson et al. Id.

It is submitted that Wilson et al. is directed to a filter media structure comprised of a blend of carbon or ceramic fibers and inorganic fiber whiskers generally having a diameter of from about 0.03 to about 5 microns (30nm to 5,000nm). (Abstract and col. 6, l. 57 to col. 7, l. 3.) The filter media structure is limited to conventional inorganic fibers, such as carbon and ceramic fibers and inorganic fiber whiskers. (Col. 6, ll. 17-56.) Wilson et al. does not disclose a sheet of fibrillated lyocell fibers. Rather, throughout the Wilson et al. patent reference is repeatedly made to fiber whiskers, not to fibrillated fibers as is currently claimed. Further, in the office action, the Examiner has taken the position that the term "fibrillated" in applicant's claim is merely a process limitation within a product claim. Applicant disagrees and submits that the term "fibrillated" defines applicant's claimed product in terms of the process by which it is

made, and as such, is a positive claim limitation that should be taken into consideration by the Examiner. In re Luck, 476 F.2d 650, 177 USPQ 523 (CCPA 1973); In re Pilkington, 411 F.2d 1345, 162 USPQ 145 (CCPA 1969); In re Steppan, 394 F.2d 1013, 156 USPQ 143 (CCPA 1967) (A product-by-process claim, which is a product claim that defines the claimed product in terms of the process by which it is made, is proper.)

Also, in the above office action, the Examiner has recognized that Wilson et al. does not teach a sheet of fibrillated lyocell fibers and a microbiological interception enhancing agent. Accordingly, the claims of the instant invention include limitations not disclosed nor contemplated by Wilson et al. such that Wilson et al. does not anticipate nor render obvious the instant invention.

Wilson et al. in view of Patrick et al.

The Examiner has also rejected claims 16 and 30 under 35 U. S.C. 103(a) as being obvious over Wilson et al. in view of Patrick et al. (US5,762,797). Applicant disagrees.

Again, the instant invention is directed to sheets comprising fibrillated fibers and a microbiological interception enhancing agent on a portion of some of these fibrillated fibers. As discussed above, Wilson et al. does not anticipate nor render obvious the instant invention due to limitations in the invention which are not disclosed in Wilson et al. because Wilson et al. does not disclose a sheet of fibrillated fibers in combination with a microbiological interception enhancing agent. The Patrick et al. patent does not overcome the deficiencies of the Wilson et al. patent since it only discloses a yarn wrapped over a microporous structure along a length of an underlying perforated core to form a first spiral wound layer. (Col. 4, ll. 13-17.) The yarn is made from fibers that are merely topically treated with an antimicrobial, or have the antimicrobial

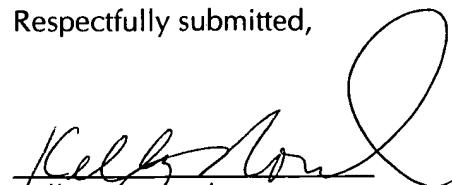
impregnated therein. (Col. 4, ll. 30-45.) Patrick et al. does not disclose or suggest fibers with microbiological interception enhancing agent only on a portion thereof, nor does it disclose or suggest forming the yarn such that it the yarn has fibers with a microbiological only on a portion of some of such fibers.

Furthermore, applicants submit that none of the cited references disclose, contemplate or suggest the claimed Canadian Standard Freeness measure, nor has the Examiner given any comment or review thereon.

It is for these reasons that applicant submits that neither Wilson et al. nor Patrick et al. taken singly or in any proper combination thereof discloses the instant invention. Applicant submits that Wilson et al., in combination with Patrick et al., does not render obvious the instant invention.

It is respectfully submitted that the application has now been brought into a condition where allowance of the case is proper. Reconsideration and issuance of a Notice of Allowance are respectfully solicited. Should the Examiner not find the claims to be allowable, Applicants' attorney respectfully requests that the Examiner call the undersigned to clarify any issue and/or to place the case in condition for allowance.

Respectfully submitted,



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